

CHAPTER V.

THE FLORA OF THE EARLY MESOZOIC.

GREAT physical changes occurred at the close of the Carboniferous age. The thick beds of sediment that had been accumulating in long lines along the primitive continents had weighed down the earth's crust. Slow subsidence had been proceeding from this cause in the coal-formation period, and at its close vast wrinklings occurred, only surpassed by those of the old Laurentian time. Hence in the Appalachian region of America we have the Carboniferous beds thrown into abrupt folds, their shales converted into hard slates, their sandstones into quartzite and their coals into anthracite, and all this before the deposition of the Triassic Red Sandstones which constitute the earliest deposit of the great succeeding Mesozoic period. In like manner the coal-fields of Wales and elsewhere in western Europe have suffered similar treatment, and apparently at the same time.

This folding is, however, on both sides of the Atlantic limited to a band on the margin of the continents, and to certain interior lines of pressure, while in the middle, as in Ohio and Illinois in America, and in the great interior plains of Europe, the coal-beds are undisturbed and unaltered. In connection with this we have an entire change in the physical character of the deposits, a great elevation of the borders of the continents, and probably a considerable deepening of the seas, leading to the establishment of general geographical conditions which still remain, though they have been temporarily modified by subsequent subsidences and re-elevations.